

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

BRIDGE INSPECTION REPORT

1800035

BRIDGE NUMBER

CUY 00002 1441

YEAR BUILT

1940

Structure File Number

DIST

12

Bridge Type

343

TYPE SERVICE

5 8

(1476)CUY RIVER,RTA,FLATS

DECK		out/out 85.5 Deck Area 562,591 sqft		1	3 LATEX MODIFIED CONCRETE OVERLAY		1
1. FLOOR		1 REINF CONCRT (PRESTRSD, PRECAST)			2. WEARING SURFACE		
3. CURBS, SIDEWALKS AND WALKWAYS					4. MEDIAN		2
5. RAILING				2	6. DRAINAGE		3
7. EXPANSION JOINTS				2	8. SUMMARY		7
SUPERSTRUCTURE					10 RIVETED BUILT-UP STEEL		
9. ALIGNMENT				2	10. BEAMS/GIRDERS/SLAB		2
11. DIAPHRAGMS or CROSSFRAMES				1	12. JOISTS/STRINGERS		2
13. FLOOR BEAMS				2	14. FLOOR BEAM CONNECTIONS		1
15. VERTICALS				2	16. DIAGONALS		2
17. END POSTS					18. UPPER CHORD		3
19. LOWER CHORD				3	20. GUSSET PLATES		3
21. LATERAL BRACING				2	22. SWAY BRACING		2
23. PORTALS					24. BEARING DEVICES		1
25. ARCH					26. ARCH COLUMNS or HANGERS		
27. SPANDREL WALLS					28. PROTECTIVE COATING SYSTEM		6
29. PINS/HANGERS/HINGES				2	30. FATIGUE PRONE DETAIL (E, E')		
31. LIVE LOAD RESPONSE (E OR S)				S	32. SUMMARY		4
SUBSTRUCTURE					2 CANTILEVER		
33. ABUTMENTS				2	34. ABUTMENT SEATS		2
35. PIERS				2	36. PIER SEATS		1
37. BACKWALLS				2	38. WINGWALLS		2
39. FENDERS and DOLPHINS				2	40. SCOUR (INSP TYPE - 1,2,3)		1
41. SLOPE PROTECTION				1	42. SUMMARY		6
CULVERTS					44. ALIGNMENT		
43. GENERAL					46. SEAMS		
45. SHAPE					48. SCOUR (INSP TYPE - 1,2,3)		
47. HEADWALLS or ENDWALLS					50. SUMMARY		
49. ABUTMENT					52. PROTECTION		1
51. ALIGNMENT				1	54. SUMMARY		8
53. HYDRAULIC OPENING				1	56. APPROACH SLABS		2
55. PAVEMENT				2	58. RELIEF JOINTS		1
57. GUARDRAIL				2	60. SUMMARY		6
59. EMBANKMENT				3	62. WARNING SIGNS		1
61. NAVIGATION LIGHTS				4	64. UTILITIES		
63. SIGN SUPPORTS				1	66. GENERAL APPRAISAL & OPERATIONAL STATUS		4
65. VERTICAL CLEARANCE				2			A
67. INSPECTED BY				68. REVIEWED BY			
SIGNED				SIGNED			
Name ANTHONY KOLOZE				Name WESLEY WEIR			
DATE 12/22/2011				DATE 12/22/2011			
1 1 1 1 1 0 1 N				SURVEY			

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PE Number

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DECK

FLOOR: ISOLATED MINOR SPALLING AND MINOR CRACKING WITH EFFLORESCENCE. SIP FORMS EXHIBIT MINOR CORROSION AT JOINT LOCATIONS.

RAILING: MEDIAN AND FASCIA PARAPETS EXHIBIT NUMEROUS SMALL TO LARGE SIZED SPALLS, TYPICALLY WITHIN THE UPPER HALF OF THE BARRIERS.

ISOLATED FASCIA LOCATIONS EXHIBIT DELAMINATIONS WHERE IMMINENT SPALLING IS ANTICIPATED AND COULD POSE HAZARD TO THE PUBLIC BELOW

BARRIER, ISOLATED SPALLS AND DELAMINATIONS ON PARAPET THROUGHOUT.

DRAINAGE: HEAVY DETERIORATION OF TRUSS DRAINAGE TROUGHS AND TROUGH LINERS. WATER SPILLING ONTO TRUSS AND SUBSTRUCTURE UNITS AT MANY LOCATIONS.

DOWNSPOUTS AND CATCH BASINS AT PIER 37 ARE BLOCKED. ISOLATED CATCH BASINS THROUGHOUT THE WEST APPROACH ARE BLOCKED

EROSION CHANNELS FORMING.

SCUPPERS ARE TYPICALLY PARTIALLY CLOGGED.

EX.JOINTS: HEAVY DEBRIS IN GLANDS THROUGHOUT, VERTICAL MISALIGNMENT RESULTING IN PLOW CATCH POINT AND DAMAGE ON WESTBOUND ROADWAY.

GLANDS TYPICALLY EXHIBIT BULGING AND CRACKING UP TO 50% OF THE JOINT LENGTH.

SUPERSTRUCTURE

ALIGNMENT: The south fascia beam over West 6th Street (northbound lane) exhibits moderate impact damage.

Isolated stringer sliding bearings exhibit minor vertical misalignment at the bearing interface in the trestle section.

BEAM/G/S: Girders in the Lakefront Ramp exhibit localized deep pitting with small areas of advanced section loss.

Concrete beams in Section P exhibit large areas of spalling and moderate section loss to the primary reinforcement.

DIAPHRAGMS OR CROSS FRAMES: Crossframe and diaphragm deficiencies include minor section loss (steel) and cracking (concrete).

Utility deck concrete at Bent 4 in the East Forward Approach exhibit isolated cracking.

JOISTS/STRINGERS: Fascia beams in Sections K and C (over W. 28th Street) exhibit localized, out-of-plane bending at the web to top flange welds.

These locations are distressed showing indications of cracking and were not previously documented (as of 2011).

FLOORBEAMS: Floorbeams at Bent 14 (east forward approach) and Bent 37 (trestle section) exhibit localized advanced

losses.

FLOORBEAM CONNECTIONS: There are no significant deficiencies noted at the floorbeam connections.

VERTICALS: Isolated members exhibit deep web, flange, and cover plate pitting, cleaned and painted, typically near the pin locations.

DIAGONALS: Isolated members exhibit deep web pitting, cleaned and painted, typically near the lower chord.

UPPER CHORD: Upper chord members local to the expansion joint locations exhibit isolated pitting up to 1/4" deep, cleaned and painted.

LOWER CHORD: Localized advanced section losses, typically isolated to areas below and adjacent to the expansion joints.

Isolated members exhibit areas with 100% section loss.

GUSSET PLATES: Isolated gusset plates exhibit localized advanced section losses with small areas up to 100% section loss along the failure planes.

LATERAL BRACING: Cleaned and painted deep pitting in some locations, typically at members below and adjacent to exp. joints.

SWAY BRACING: Cleaned and painted deep pitting in some locations, typically at members below and adjacent to exp. joints.

BEARING DEVICES: Minor misalignment of stringer sliding bearings at isolated locations in the trestle section.

PCS: Widespread paint failures throughout the Lakeside Ramp and Trestle sections, with isolated locations exhibiting active surface rusting.

PINS/H/H: Pin plates in the Trestle section exhibit light to moderate active pitting. Truss functioning as designed, some with moderate wear grooves.

SUBSTRUCTURE

ABUTMENTS: Minor cracking of the breastwall at the East Abutment.

ABUTMENT SEATS: Moderate spalling between the bearings at the East Abutment. No undermining of the masonry plates.

PIERS: Large spalls near drainage hoppers at truss piers. Heavy spalling of pedestals throughout.

Steel bents exhibit isolated heavy pitting, cleaned and painted. Steel piers in the Lakefront Ramp section with rust reactivating between plates.

PIER SEATS: Minor to moderate spalling of the truss pier seats. The south pedestal at Trestle bent 37 is spalled and bearing with minor undermine.

BACKWALLS: Minor cracking and delaminated concrete at the

East Abutment.

WINGWALLS: Large spalls at the curtain walls east of W. 3rd Street.

FENDERS AND DOLPHINS: Advanced section loss to the steel members at the east bank fender system.

SLOPE PROTECTION: New rip rap at the east bank of the Cuyahoga River is in good condition.

APPROACHES

PAVEMENT: MINOR SPALLING AT THE APPROACHES.

APPROACH SLABS: MINOR SPALLING.

GUARDRAIL: MODERATE TO HEAVY IMPACT DAMAGE NOTED AT ALL ATTENUATORS.

EMBANKMENT: DEEP EROSION CHANNEL EAST OF PIER 37 DUE TO CLOGGED CATCH BASIN.

EROSION CHANNEL UP TO 54" DEEP WITH AN EXPOSED PILE CAP (WAS ROUGHLY 1' DEEP IN 2009).

GENERAL

NAVIGATION LIGHTS: NAVIGATION LIGHTS NON-OPERATIONAL ON BOTH THE EAST FENDER SYSTEM AND THE WEST BANK DOLPHINS.

VERTICAL CLEARANCE: VERTICAL CLEARANCE SIGNS NOT PRESENT AT THE W.3RD STREET EB ON-RAMP,

COLLISION DAMAGE NOTED TO SOUTH GIRDER AT THIS UNDERPASS - MEASURED 14'-1" AT NORTH CURB AND SHOULD BE POSTED FOR 13'-10".